

## **REMARKS/ARGUMENTS**

By the present amendment, five (5) claims are amended and two (2) claims are cancelled. Applicants hereby submit that no new matter has been added and no change in inventorship is believed to result from the amendments proposed herein. No claims fees are believed payable. If any fee is deemed payable, please charge such fee to Deposit Account No. 13-0019.

The amendments proposed herein are made solely to expedite prosecution of various embodiments of the invention. Applicants expressly reserve the right to prosecute one or more cancelled claims or any subject matter enabled by the instant specification in one or more continuing applications.

Support for amended claim 2 can be found in the specification as file at least at page 23, lines 26 – 27.

Support for amended claim 33 can be found in the specification as file at least at page 23, lines 26 – 27.

Support for amended claim 65 can be found in the specification as file at least at page 6, lines 14 – 15 and page 24, lines 25 – 31.

Support for amended claim 66 can be found in the specification as file at least at page 6, lines 14 – 15 and page 24, lines 25 – 31.

Support for amended claim 71 can be found in the specification as file at least at page 9, lines 6 - 15.

## **RESPONSE TO RESTRICTION**

In response to the restriction requirement dated April 14, 2005, Applicants elected Group I which was established by the Examiner in the Office Action mailed on March 10, 2004. Group I, according to the March 10, 2004 Office Action, included claims 1 – 49, 74 – 105, 59 – 67 and 71 – 73. Applicants also provided a single disclosed species and a list of claims that read upon the single disclosed species. That list included claims 1, 2, 3, 11, 17, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 81, 82, 83, 84, 85, 86, 87, 88, 103, 104 and claim 109. The revised list of pending claims covering species readable on the single disclosed species includes at least claims: 2, 59, 60, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 88, 103, and 104.

## **RESPONSE TO OFFICE ACTION DATED JUNE 22, 2005**

### **I. Rejection under 35 U.S.C. § 112.**

Claims 2, 59-60, 62-67, 71-73, 88 and 104 stand rejected under 35 U.S.C. § 112.

Applicants respectfully traverse this rejection.

The Examiner states that claim 2 is indefinite because it is unclear what one of ordinary skill in the art would consider as a “sufficient time period” or “desired level of contaminant”. Applicants respectfully believe these phrases are well within the understanding of a person of ordinary skill in the art. Nonetheless, to expedite prosecution of one embodiment of the invention, Applicants have amended the language in question to read: “removing contaminant from the substrate in presence of at least one organic solvent and in absence of pressurized fluid solvent”. This language is unambiguous and finds support throughout the specification, for example at least at page 23, lines 26 – 27 that states “[t]hrough this process, contaminants are removed from the textiles”. Withdrawal of this rejection is therefore respectfully requested.

The Examiner states that claim 71 is indefinite because it is unclear how a furniture can be a textile. It is respectfully pointed out that some furniture pieces are in fact entirely composed of textiles. Nonetheless, to expedite prosecution of one embodiment of the invention, the word “furniture” has been removed from claim 71. Withdrawal of this rejection is therefore respectfully requested.

The Examiner states that claim 88 is not further limiting. Applicants respectfully disagree. Applicants point out that according to claim 2, R' can be O, S, carbonyl or ester. Claim 88 limits R' to O. As such, it is further limiting. Withdrawal of this rejection is therefore respectfully requested.

Claim 104 is cancelled and the rejection with respect to this claim is thus moot.

Claims 65-66 are rejected as being indefinite; the Examiner states that it is unclear whether the pressure recited is the pressure at which the organic solvent is being removed by the fluid. Applicants have amended these claims to indicate that the pressurized fluid solvent is at the specified pressure “during the step of removing a remaining portion of the organic solvent from the substrate using at least one pressurized fluid solvent”. Applicants therefore respectfully request withdrawal of this rejection.

## II. Rejection Under 35 U.S.C. 102(e) as anticipated by U.S. 6,148,645 to DeYoung et al.

Claims 2, 59-60, 62-64, 65-66, 71-73, 78 and 104 stand rejected under 35 U.S.C. 102(d) as anticipated by U.S. 6,148,645 (DeYoung). Applicants respectfully traverse this rejection.

MPEP § 2131 provides that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). MPEP § 2131 further requires that “the identical invention must be shown in as complete detail as is contained in the patent claim.” *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). As will be discussed below, each and every element of Applicants claims 2, 59-60, 62-64, 65-66, 71-73, 78 and 104 are not disclosed in DeYoung.

The Examiner states that DeYoung et. al., “teach pumping liquid carbon dioxide cleaning solution into the wash vessel after the detergent formulation has been transferred to the wash vessel. Specifically, the detergent formulation is transferred to the vessel followed by liquid CO<sub>2</sub> cleaning solution”. Applicants respectfully disagree with this characterization of DeYoung.

Applicants’ claim 2 and all those claims depending therefrom require a step of “removing contaminant from the substrate in presence of at least one organic solvent and in absence of pressurized fluid solvent”. This step is not disclosed anywhere in DeYoung. In fact, according to DeYoung, the detergent is only ever in the presence of the substrates to be cleaned when CO<sub>2</sub> is already present. That is, according to DeYoung, there is no step of removing contaminant from the substrate in presence of at least one organic solvent ***and in absence of pressurized fluid solvent***. Instead, DeYoung’s system employs a wash vessel and an auxiliary vessel. Pressurized carbon dioxide is added to DeYoung’s wash vessel along with the items to be cleaned. The detergent formulation, on the other hand, is added to the auxiliary vessel where it can then be transferred to the wash vessel to combine with the carbon dioxide and substrates to be cleaned that are already present in the wash vessel.

Applicants respectfully draw the Examiner’s attention to several passages throughout DeYoung that confirm this, for example column 2, lines 30 – 36.

An advantage of this apparatus is that, because the detergent formulation can be pumped into the auxiliary vessel in a predetermined aliquot or amount, which predetermined aliquot or amount can then be transferred into the wash vessel ***where it combines with the liquid carbon dioxide cleaning solution***.

At column 9, lines 57 – 61, DeYoung states that:

It is important that the addition of the detergent is accomplished in a fashion to produce copious mixing of the detergent with the CO<sub>2</sub> containing was fluid ***prior to the exposure of the items to be cleaned.***

Again, DeYoung makes clear that the CO<sub>2</sub> and detergent are to be combined before the detergent is exposed to the articles to be cleaned.

Finally, at column 12, lines 14 – 16, DeYoung states that:

The formulation (all ingredients except carbon dioxide) is added ***to the liquid carbon dioxide*** by adding it to the wash tank through an auxiliary vessel as described in connection with FIG. 1 above.

Clearly, the any detergent being used is added to the liquid carbon dioxide.

Each of the above passages, and the rest of DeYoung document itself, make clear that there is never a time when the detergent is in the presence of the substrates without carbon dioxide being present. As such, DeYoung does not disclose a step of removing contaminant from the substrate in presence of at least one organic solvent ***and in absence of pressurized fluid solvent.***

Each and every element of Applicants' claim 2, and those claims depending therefrom, are not disclosed in DeYoung. As such, no *prima facie* case of anticipation has been established. Withdrawal of the instant rejection is therefore respectfully requested.

### **III. Rejection under 35 U.S.C. § 103(a) as obvious DeYoung in view of Stucker.**

Claim 67 stands rejected as being unpatentable over DeYoung in view of Stucker (WO96/15304). Applicants respectfully traverses this rejection.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the references' teachings. Second, there must be a reasonable expectation of success. Finally, the references when combined must teach or suggest all the claim limitations. See MPEP § 2143.

The burden of establishing a *prima facie* case of obviousness lies with the Examiner. In determining obviousness, one must focus on the invention as a whole. *Symbol Technologies Inc. v. Opticon, Inc.*, 19 USPQ 2d 1241, 1246 (Fed. Cir. 1991). The primary inquiry is: "[w]hether

the prior art would have suggested to one of ordinary skill in the art that this process should be carried out and would have had a reasonable likelihood of success...Both the suggestion and the expectation of success must be found in the prior art, not the applicant's disclosure." *In re Dow Chemical*, 5 USPQ 2d 1531 (Fed. Cir. 1988). Furthermore, prior art that teaches away from the claimed invention is a strong indication of nonobviousness. *In re Soni*, 54 F.3d 746 (Fed. Cir. 1995).

**A. The references when combined do not teach or suggest all claim limitations.**

DeYoung and Stucker, even when combined, do not teach or suggest all the limitations of claim 67. Therefore, Applicants' submit that no *prima facie* case of obviousness has been established.

DeYoung is applied as above. The Examiner indicates that DeYoung fails to disclose other pressurized fluid solvents comprising xenon, nitrous oxide, or sulfur hexafluoride, but that Stucker teaches that pressurized fluid includes nitrous oxide. However, as is discussed in detail above, DeYoung does not disclose a step of removing contaminant from the substrate in presence of at least one organic solvent *and in absence of pressurized fluid solvent*. Instead, in DeYoung's system, the detergent formulation is added to the carbon dioxide and substrates that are already present in the wash vessel. Stucker does not remedy the defects of DeYoung. Stucker deals generally with cleaning of substrates in inorganic *pressurized fluid solvents*. Stucker does not disclose a step of removing contaminant from the substrate in presence of at least one organic solvent *and in absence of pressurized fluid solvent*.

DeYoung and Stucker do not disclose each and every element of Applicants' invention as embodied in claim 67. As such, Applicants submit that no *prima facie* case of obviousness has been established. Withdrawal of the instant rejection is respectfully requested.

**IV. Double Patenting Rejections.**

**A. U.S. 6,755,871.**

Claims 2 and 63 – 65 stand rejected under the judicially created doctrine of obviousness-type double patenting over claims of U.S. Patent No. 6,755,871 in view of DeYoung. Applicants will file a terminal disclaimer in relation to this patent once allowable subject matter is indicated.

**B. U.S. 6,736,859.**

Claims 2, 60 and 63-64 stand rejected under the judicially created doctrine of obviousness-type double patenting over claims of U.S. Patent No. 6,736,859 in view of

DeYoung. As a preliminary matter, Applicants point out that there is a typo in the Office Action, the proper patent is believed to be 6,736,859, not **6,736,959**. Applicants will file a terminal disclaimer in relation to this patent once allowable subject matter is indicated.

**C. U.S. 6,355,072.**

Claims 2, 60 and 63-65 stand rejected under the judicially created doctrine of obviousness-type double patenting over claims of U.S. Patent No. 6,355,072 in view of DeYoung. Applicants will file a terminal disclaimer in relation to this patent once allowable subject matter is indicated.

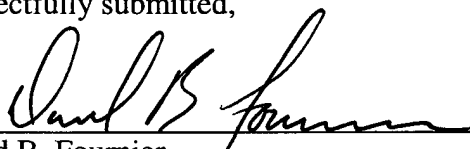
**D. U.S. Serial No. 10/797,516.**

Claims 2, 60 and 63-65 stand rejected under the judicially created doctrine of obviousness-type double patenting over claims of U.S. Serial No. 10/797,516 in view of DeYoung. Applicants will file a terminal disclaimer in relation to this application once allowable subject matter is indicated.

**CONCLUSION**

The pending claims are believed to be in condition for allowance. Early and favorable consideration is respectfully requested.

Respectfully submitted,



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